

Amendments to the Claims:

Please add Claims 49-70.

The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing:

1-43. (Canceled)

44. (Previously presented) A copper composition characterized by an anisotropic x ray emission spectrometry (XES) image.
45. (Previously presented) A copper composition wherein the radial XES image detects elements not detected in the axial XES image.
46. (Currently amended) The copper composition of Claim ~~[[38]]~~ 45 wherein the radial XES image detects an element selected from the group consisting of sulfur, chlorine, potassium, aluminum~~[[,]]~~ and silicon ~~and oxygen~~.
47. (Previously presented) A copper composition manufactured by a process consisting of exposing a starting composition to an iterative cyclic process in the presence of a carbon source, said composition is characterized by an anisotropic XES image.
48. (Previously presented) A copper composition, free of an element, characterized by an XES image that detects said element.
49. (New) A composition characterized by an X-ray fluorescence analysis report wherein the report recites the presence of an element in the periodic table wherein said composition has not been in contact with said element.
50. (New) The composition of Claim 49 comprising a metal.

51. (New) The composition of Claim 49 wherein said composition is manufactured by exposing a starting composition to an iterative cyclic process.
52. (New) The composition of Claim 49 wherein said composition is manufactured by exposing a starting composition to an iterative cyclic process in the presence of a carbon source.
53. (New) A composition characterized by an X-ray fluorescence analysis wherein the analysis recites an emission detected at room temperature indicating the presence of an element in the periodic table wherein said composition has not been in contact with said element.
54. (New) The composition of Claim 53 comprising a metal.
55. (New) The composition of Claim 53 wherein said composition is manufactured by exposing a starting composition to an iterative cyclic process.
56. (New) The composition of Claim 53 wherein said composition is manufactured by exposing a starting composition to an iterative cyclic process in the presence of a carbon source.
57. (New) The composition of claim 51 or claim 55, wherein said composition comprises gold or alloys thereof.
58. (New) The composition of claim 51 or claim 55, wherein said composition comprises silver or alloys thereof.
59. (New) The composition of claim 51 or claim 55, wherein said composition comprises tin or alloys thereof.

60. (New) The composition of claim 51 or claim 55, wherein said composition comprises lead or alloys thereof.
61. (New) The composition of claim 51 or claim 55, wherein said composition comprises zinc or alloys thereof.
62. (New) The composition of claim 51 or claim 55, wherein said composition comprises sodium or alloys thereof.
63. (New) The composition of claim 51 or claim 55, wherein said composition comprises vanadium or alloys thereof.
64. (New) The composition of claim 51 or claim 55, wherein said composition comprises chromium or alloys thereof.
65. (New) The composition of claim 51 or claim 55, wherein said composition comprises manganese or alloys thereof.
66. (New) The composition of claim 51 or claim 55, wherein said composition comprises tantalum or alloys thereof.
67. (New) The composition of claim 51 or claim 55, wherein said composition comprises hafnium or alloys thereof.
68. (New) The composition of claim 51 or claim 55, wherein said composition comprises tungsten or alloys thereof.
69. (New) The composition of claim 50 or claim 54, wherein said composition comprises gold, silver, tin, lead, zinc, sodium, magnesium, potassium, vanadium, chromium, manganese, tantalum, hafnium, tungsten or alloys thereof.